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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,107	12/13/2001	John F. McEntee	10004452-1	6455

7590 05/21/2003

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,107

Applicant(s)

MCENTEE ET AL.

Examiner

Michael P Nghiem

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 6, 9 and 23-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Amendment filed on May 9, 2003 has been acknowledged.

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 9, 2003 has been entered.

Withdrawal of Allowability

2. The indicated allowability of claims 1-5, 7, 8, and 10-13 are withdrawn in view of the newly discovered reference(s) to Nagoshi (US 4,772,900) and Erickson (US 5,367,328). Rejections based on the newly cited reference(s) follow.

Claim Objections

3. Claim 23 is objected to because of the following informalities:

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- after "medium" should insert -- comprises --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8, and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagoshi (US 4,772,900).

Nagoshi discloses all the claimed features of the invention including:

- a printing system (Fig. 4) comprising:

- a pulse-jet printhead (4) including a nozzle (o), a manometer (2) and lines (1a, 1b) configured to connect said printhead and manometer in parallel to a fluid source (1) to be connected to a variable pressure compensation source (1 communicates with the ambient via 2), wherein said system is adapted to vary an output of said variable pressure compensation source to maintain a fluid level within said manometer in a

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predetermined range to maintain fluid pressure at said nozzle within a corresponding range (pressure is maintained by opening/closing 5 via 7);

- a fluid source (1);
- a sensor (3) to generate a signal in response to the fluid level within said manometer (Fig. 4), and a control unit which generates a control signal for said variable pressure compensation source in response to said sensor signal (detector, Fig. 9b);
- a variable pressure compensation source (ambient pressure) ;
- a first valve (5) at an exit of said manometer;
- a print medium (ink);
- said pressure applied is negative pressure (when 5 closes 2a);
- said pressure applied is positive pressure (when 2a is opened).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagoshi in view of Erickson (US 5,367,328).

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Nagoshi discloses all the claimed features as discussed above except a supply vessel to feed a print medium to said fluid source, wherein the system is adapted for said feeding to occur during use of said pulse jet nozzle.

Nevertheless, Erickson discloses a supply vessel (14) to feed a print medium to said fluid source, wherein the system is adapted for said feeding to occur during use of said pulse jet nozzle (Fig. 6) for the purpose of refilling ink continuously to the print head.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Nagoshi with a supply vessel as disclosed by Erickson for the purpose of refilling continuously ink to the print head.

Allowable Subject Matter

6. Claims 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 23-29 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

Reasons For Allowance

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Reasons For Allowance

8. The combination or method as claimed wherein a printing system comprising a second valve at an entrance to a fluid reservoir (claim 6) or said print medium comprises a biopolymers or precursor thereof (claims 9, 23) is not disclosed, suggested, or made obvious by the prior art of record.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



MICHAEL NGHIEM
PRIMARY EXAMINER
Michael Nghiem

May 16, 2003